



IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Re: Application of Hollomon et al.

Art Unit: 1713

Serial Number: 10/728,145

Examiner: K. C. Egwim

Filed: December 4, 2003

Attorney's Docket: 10292

Title: Cationic or Amphoteric Copolymers Prepared in an Inverse Emulsion Matrix and  
Their Use in Preparing Cellulosic Fiber Compositions

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR 1.97(B)**

**Mail Stop RCE**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

November 14, 2005

Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents on the attached listing. This Information Disclosure Statement is being filed before the mailing date of a first Office Action after the filing of a Request for Continued Examination in the above-referenced application.

**1. Copending Application**

In an abundance of caution, Applicants note that U.S. Application No. 10/313,632 is a copending application assigned to Hercules, which was filed on December 6, 2002. A copy of the published application, US 2004-0102528 A1, is submitted for the

Examiner's consideration. That application currently claims water-soluble copolymer composition comprising

at least one associative inverse emulsion anionic copolymer, wherein the associative properties of the at least one associative inverse emulsion anionic copolymer are provided by an effective amount of at least one emulsification surfactant chosen from diblock and triblock polymeric surfactants wherein said at least one associative inverse emulsion anionic copolymer comprises:

at least one nonionic polymer segment B comprised of one or more ethylenically unsaturated nonionic monomers, and

at least one anionic polymer segment F comprised of one or more ethylenically unsaturated anionic monomers;

the molar % ratio of B:F is from 95:5 to 5:95; and

wherein said at least one associative inverse emulsion anionic copolymer has a Huggins' constant (k') determined in 0.01 M NaCl greater than 0.75; and said at least one associative inverse emulsion anionic copolymer has a storage modulus (G') in a 1.5 wt. % actives polymer solution at 4.6 Hz greater than 175 Pa.

For the Examiner's convenience, Applicants also submit herewith documents that were submitted by Applicants or cited in the copending application but that have not yet been submitted in the present application. Applicants also submit a copy of the two Office Actions issued in the copending case along with a copy of Applicants' responses to those actions. The Examiner is encouraged to monitor the prosecution of that copending application, which is currently assigned to Art Unit 1731, and to Examiner Fortuna.

## **2. Pending Litigation**

"Where the subject matter for which a patent is being sought is or has been involved in litigation, the existence of such litigation and any other material information arising therefrom must be brought to the attention of the U.S. Patent and Trademark Office." MPEP § 2001.06(c). Applicants hereby notify the Examiner that subject matter at least related to the copending application discussed above is currently involved in litigation. Specifically, Applicants submit herewith the US District Court Civil Docket for the case styled *Ciba Specialty Chemicals Corp. v. Hercules Inc. and Cytec Industries, Inc.* Civil Action No. 04-293 (KAJ), District of Delaware.

In that case, Ciba brought suit on U.S. Patent Nos. 5,167,766 ("the '766 patent") and 5,171,808 ("the '808 patent"), both of record. Ciba alleges that Hercules' commercial product PerForm® SP9232, which is covered by the claims of the copending application, infringes at least claims 1, 3, 5, 9, 11, 13, 17, 21, 23, and 25 of the '766 patent and at least claims 1, 6-8, 11, 13, 15, 17, 20, and 21 of the '808 patent. See, e.g., Complaint, a copy of which is filed herewith. In response, Hercules has alleged that it is not infringing, that Ciba is estopped by prosecution history from asserting that the '766 patent and the '808 patent are infringed, and that the '766 patent and the '808 patent are unenforceable and invalid under §§ 102 and/or 103 in view of certain prior art (a copy of which is filed herewith) and under § 112, due to claim indefiniteness. See, e.g., Answer and Amended Answer, a copy of each of which is filed herewith. Applicants also submit herewith documents related to pending litigation, including public versions of expert reports and their exhibits. Those reports discuss,

*inter alia*, validity issues regarding the '766 patent and the '808 patent and infringement issues regarding PerForm® SP9232.

Each party to the pending litigation has a protective order that presumably covers their confidential information. Accordingly, information has been redacted by the litigants in the public versions of the reports, and Applicants' representatives are not privy to that information. **If, however, the Examiner believes that any of the redacted information is necessary or would like further information regarding the general nature of the redacted information, please let the undersigned know immediately and she will contact the litigants to seek a voluntary waiver.**

Hypermer B246SF, a surfactant within the scope of the claims of the present application, is used to make Hercules' commercial product, PerForm® SP9232, which Hercules believes is covered by the claims of the copending application discussed above. Certain compositions of the present application have been claimed as associative emulsions. See, e.g., claim 30.

Based on the public versions of the expert reports submitted herewith, it appears that Hercules' experts are of the opinion that Hypermer B246SF is not a crosslinking agent. See, e.g., the public version of Expert Report of James N. Greenshields submitted herewith at pages 7-8 (citing Hernandez-Barajas publications which are also submitted herewith), the public version of Rebuttal Report of Robert K. Prud'Homme submitted herewith at pages 12-13 (citing patents which are also submitted herewith), and the public version of Rebuttal Expert Report of Charles P. Klass submitted herewith at page 9.

However, at least one of Ciba's experts has asserted that PerForm® SP9232 is crosslinked by Hypermer B246SF. Specifically, the public version of Supplemental Expert Report of Robert G. Gilbert, Ph.D. submitted herewith asserts that Hypermer B246SF functions as both a surfactant and a cross-linking agent during the preparation of PerForm® SP9232. See, e.g., pages 4-6 of that report.

As discussed above, Applicants' representatives are not privy to the redacted material in any of the expert reports. Presumably, the redacted information contains argumentation and/or experimentation relating to the issue of whether Hypermer B246SF, which falls within the scope of the claims of the present application, crosslinks anionic copolymers during the preparation of PerForm® SP9232, which product falls within the scope of the claims of the copending application discussed above.

For the Examiner's convenience, the attached PTO SB/08 forms have been divided into two groups and a descriptive cover sheet has been added to distinguish between each group of forms.

Copies of the listed documents, including any copending patent applications, are attached. To avoid burdening the record, Applicants have eliminated duplicates of documents.

Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached PTO SB/08 forms.

**If the Examiner would like additional information concerning the pending litigation or the copending application, the Examiner is encouraged to contact the undersigned.**

If there is any fee due in connection with the filing of this Statement, please charge the fee to Deposit Account No. 08-1800.

If there are any questions or comments regarding this paper or the present application, the Examiner is invited to contact the undersigned at the below listed telephone number.

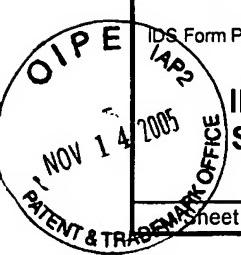
Respectfully submitted,



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302-594-5833

Hercules Incorporated  
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1313 North Market Street  
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US



IDS Form PTO/SB/08: Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

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of

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### Complete if Known

Application Number	10/728,145
Filing Date	December 4, 2003
First Named Inventor	Hollomon
Art Unit	1713
Examiner Name	Egwim, Kelechi Chidi
Attorney Docket Number	10292

### U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS

Examiner Initials	Cite No. <sup>1</sup>	Document Number	Issue or Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US-3,836,537	09-17-1994	Boerwinkle et al.	
		US-3,974,116	08-10-1976	Lissant	
		US-4,505,828	03-19-1985	Lipowski et al.	
		US-4,552,670	11-12-1985	Lipowski et al.	
		US-4,599,390	07-08-1986	Fan et al.	
		US-4,673,704	06-16-1987	Flesher et al.	
		US-4,702,844	10-27-1987	Flesher et al.	
		US-4,875,055	10-17-1989	McCann et al.	
		US-5,098,520	03-24-1992	Begala	
		US-5,171,808	12-15-1992	Ryles et al.	
		US-5,200,448	04-06-1993	Robinson et al.	
		US-5,208,216	05-04-1993	Williamson et al.	
		US-5,298,555	03-29-1994	O'Connor et al.	
		US-5,468,797	11-21-1995	Adams et al.	
		US-5,518,634	05-21-1996	Pillai et al.	
		US-5,679,740	10-21-1997	Heitner	
		US-5,739,190	04-14-1998	Hartmann et al.	
		US-5,750,614	05-12-1998	Hund et al.	
		US-5,788,867	08-04-1998	Pearson	
		US-5,837,215	11-17-1998	Tippett et al.	
		US-5,883,181	03-16-1999	Cicchiello et al.	
		US-5,939,485	08-17-1999	Bromberg et al.	
		US-5,958,188	09-28-1999	Heard et al.	
		US-5,985,992	11-16-1992	Chen	
		US-6,020,422	02-01-2000	Connors	
		US-6,040,376	03-21-2000	Mallon et al.	
		US-6,107,398	08-22-2000	Mallo et al.	
		US-6,210,585	04-03-2001	Tippett et al.	
		US-6,217,778	04-17-2001	Shing et al.	
		US-6,221,956	04-24-2001	Chen	
		US-6,310,157	10-30-2001	Heard et al.	

Examiner Signature		Date Considered	
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

IDS Form PTO/SB/08: Substitute for form 1449A/PTO				<b><i>Complete if Known</i></b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>				<i>Application Number</i>	10/728,145
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				<i>Examiner Name</i>	Egwim, Kelechi Chidi
Sheet	2	of	5	<i>Attorney Docket Number</i>	

## **U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS**

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		Number-Kind Code <sup>4</sup> (if known)			
		US-6,313,199	11-06-2001	Davies et al.	
		US-6,331,229	12-18-2001	Wong Shing et al.	
		US-6,359,031	03-19-2002	Lykke et al.	
		US-6,444,091	09-03-2002	Ward et al.	
		US-2002/0176836	11-28-2002	Belli et al.	
		US-2002/0190005	12-19-2002	Branning	
		US-2004/0102528 A1	05-27-2004	Walchuk et al.	

## **NON PATENT LITERATURE DOCUMENTS**

Examiner Signature		Date Considered	
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		Number-Kind Code <sup>6</sup> (if known)			
		US-4,172,066	10-23-1979	Zweigle et al.	
		US-4,147,688	04-03-1979	Makhlouf et al.	
		US-4,203,877	05-20-1980	Baker	
		US-4,426,485	01-17-1984	Hoy et al.	
		US-4,528,321	07-09-1985	Allen et al.	
		US-4,659,431	04-21-1987	Probst et al.	
		US-4,681,912	07-21-1987	Durand et al.	
		US-4,720,346	01-19-1988	Flesher et al.	
		US-4,759,856	07-26-1988	Farrar et al.	
		US-4,921,903	05-01-1990	Fong	
		US-5,104,552	04-14-1992	Cicchiello	
		US-5,132,023	07-21-1992	Kozakiewicz et al.	
		US-5,171,808	12-19-1992	Ryles et al.	
		US-5,180,473	01-19-1993	Akune et al.	
		US-5,958,188	09-28-1999	Heard et al.	
		US-6,310,157	10-30-2001	Heard et al.	
		US-2004/0102528 A1	05-27-2004	Walchuk et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation <sup>10</sup>
		Country Code <sup>7</sup> Number <sup>8</sup> Kind Code <sup>9</sup> (if known)				
		EP 0 202 780	11-26-1986	Flesher et al.		
		EP 0 584 771 A1	03-02-1994	Long et al.		

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		U.S. District Court Civil Docket (District of Delaware; Ciba Specialty Chemicals Corp. v. Hercules Inc. and Cytec Industries, Inc.).	
		Complaint dated May 7, 2004.	
		Answer and Counterclaims of Defendant Hercules, Inc. dated November 17, 2004.	
		Amended Answer and Counterclaims of Defendant Hercules, Incorporated.	

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		Public version of Expert Report of Robert K. Prud'homme dated September 7, 2005 (unredacted version dated July 22, 2005).	
		Exhibit A to public version of Expert Report of Robert K. Prud'homme: Curriculum Vitae of Robert K. Prud'homme.	
		Public version of Expert Report of James N. Greenshields dated September 7, 2005 (unredacted version dated August 19, 2005).	
		Exhibit A to public version of Expert Report of James N. Greenshields: Curriculum Vitae of James N. Greenshields.	
		Exhibit H to public version of Expert Report of James N. Greenshields: Hernandez-Barajas et al., Polymers for Advanced Technologies, 6:509-517 (1995).	
		Exhibit I to public version of Expert Report of James N. Greenshields: Hernandez-Barajas et al., Polymer, 38(2):437-447 (1997).	
		Public version of Expert Report of Charles P. Klass dated July 22, 2005.	
		Exhibit A to public version of Expert Report of Charles P. Klass: Curriculum Vitae of Charles P. Klass	
		Exhibit D to public version of Expert Report of Charles P. Klass: Avery, Tappi 62(2):43-46 (1979).	
		Public version of Rebuttal Expert Report of Charles P. Klass dated September 7, 2005 (unredacted version dated August 19, 2005).	
		Exhibit D to public version of Rebuttal Expert Report of Charles P. Klass: Dictionary of Paper, 5 <sup>th</sup> Edition, 181, 195 (Michael Kouris ed., Tappi Press 1996).	
		Exhibit E to public version of Rebuttal Expert Report of Charles P. Klass: Retention of Fines and Fillers During Papermaking 80-97 and 175 (Jerome M. Gess ed., Tappi Press 1998).	
		Public version of Rebuttal Expert Report of Robert K. Prud'homme dated September 7, 2005 (unredacted version dated August 19, 2005).	
		Exhibit 5 to Rebuttal Expert Report of Robert K. Prud'homme: Cabane et al., Nature 314:385 (1985).	
		Exhibit 6 to Rebuttal Expert Report of Robert K. Prud'homme: Grieser et al., J. Phys. Chem. 92(20):5580-5593 (1988).	
		Exhibit 17 to Rebuttal Expert Report of Robert K. Prud'homme: Pure and Applied Chemistry 40(3):479-491 (1974).	
		Exhibit 18 to Rebuttal Expert Report of Robert K. Prud'homme: Pure and Applied Chemistry 68(12):2287-2311 (1996).	
		Exhibit 20 to Rebuttal Expert Report of Robert K. Prud'homme: Polymer Handbook 23-24 (J Brandup & E.H. Immergut eds., Wiley Interscience 1995).	
		Exhibit 24 to Rebuttal Expert Report of Robert K. Prud'homme: Jain et al., Macromolecules 37:1511-1523 (2004).	
		Exhibit 28 to Rebuttal Expert Report of Robert K. Prud'homme: Panmai et al., Langmuir 18:3860-3864 (2002).	
		Exhibit 32 to Rebuttal Expert Report of Robert K. Prud'homme: Graph prepared by Dr. Robert Gelman.	
		Exhibit 33 to Rebuttal Expert Report of Robert K. Prud'homme: NMR measurements performed by Hercules.	
		Public version of Supplemental Expert Report of James N. Greenshields dated September 26, 2005.	
		Public version of Supplemental Expert Report of Charles P. Klass dated September 26, 2005.	
		Public version of Supplemental Expert Report of Robert K. Prud'homme dated September 26, 2005.	
		Public version of Expert Report of Professor Norman J. Wagner, Ph.D., dated July 22, 2005.	

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		Exhibit A to public version of Expert Report of Professor Norman J. Wagner: Curriculum Vitae of Professor Norman J. Wagner.	
		Exhibit B to public version of Expert Report of Professor Norman J. Wagner: List of Documents and Materials considered by Norman J. Wagner.	
		Public version of Expert Report of Professor Robert G. Gilbert, Ph.D., dated July 22, 2005.	
		Exhibit A to public version of Expert Report of Professor Robert G. Gilbert: Curriculum Vitae of Professor Robert G. Gilbert.	
		Exhibit B to public version of Expert Report of Professor Robert G. Gilbert: Publications by Professor Robert G. Gilbert.	
		Exhibit C to public version of Expert Report of Professor Robert G. Gilbert: List of documents considered by Professor Robert G. Gilbert.	
		Hunkeler, Polymer 22:5623-41 (1997).	
		Lamb et al., Biomacromolecules 2:518-525 (2001).	
		Subramaniam et al., Macromol. Symp. 152:43-53 (2000).	
		Santangelo et al., J. Non-Crystalline Solids 235:709-716 (1988).	
		Moad et al., Macromolecules 29:7717-7726 (1996).	
		Seabrook et al., J. Polym. Sci. Part A Polym. Chem. 43:1357-1368 (2005).	
		Lacik et al., Macromol. Chem. Phys. 205:1080-1087 (2004).	
		Gavat et al., J. Polym. Sci. Polymer Symp. 64:125-140 (1978).	
		Matsuoka et al., Polymer 43:3447-3453 (2002).	
		Rotureau et al., Macromolecules 38:4940-4941 (2005).	
		International Union of Pure and Applied Chemistry Macromolecular Division, Commission on Macromolecular Nomenclature, Glossary of Basic Terms in Polymer Science (IUPAC Recommendations 1996).	
		Public version of Rebuttal Expert Report of Clarence A. King, Ph.D., dated August 19, 2005.	
		Public version of Rebuttal Expert Report of Robert G. Gilbert, Ph.D., dated August 18, 2005.	
		Public version of Supplemental Report of Norman J. Wagner, Ph.D., dated October 14, 2005.	
		Exhibit D to public version of Supplemental Report of Norman J. Wagner: Ma et al., Macromolecules 35:2024-2029 (2002).	
		Exhibit F to public version of Supplemental Report of Norman J. Wagner: Barnes, J. Rheology 33(2):329-366 (1989).	
		Public version of Supplemental Report of Clarence A. King, Ph.D., dated October 14, 2005.	
		Public version of Supplemental Report of Professor Robert G. Gilbert, dated October 14, 2005.	
		Exhibit Q to public version of Supplemental Expert Report of Robert G. Gilbert, Ph.D.: portion of prosecution history of U.S. Application NO. 07/886,209, which issued as U.S. Patent No. 5,274,055.	

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